

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application.

LISTING OF CLAIMS

1. (currently amended) A fuel cell comprising:

a hydrogen flow path adapted to pass hydrogen into communication with an anode catalyst of an MEA;

a coolant flow path adapted pass a liquid coolant through the fuel cell to cool the fuel cell;

an enclosure encompassing at least a part of the hydrogen flow path~~[[,]]~~ and at least a part of the coolant flow path, ~~or both~~; and

a hydrogen vent adapted to vent hydrogen from the enclosure without reliance upon any electrical device.

2. (currently amended) A fuel cell according to Claim 1, wherein the enclosure surrounds a member selected from the group consisting of ~~one~~ of a fuel cell stack through which the hydrogen flow path and the coolant flow path pass, a coolant reservoir of the coolant flow path, and a hydrogen supply reservoir of the hydrogen flow path.

3. (original) A fuel cell according to Claim 2, wherein the hydrogen vent comprises a porous material selected from the group consisting of cellulose, plastic and metal.

4. (currently amended) A fuel cell according to Claim 1, wherein the enclosure ~~[[is]]~~ surrounds a coolant reservoir and the hydrogen vent is located within a wall of the coolant reservoir.

5. (currently amended) A fuel cell according to Claim 4, wherein the hydrogen vent is further adapted to substantially prevent the liquid coolant from passing through the vent.

6. (original) A fuel cell according to Claim 1, wherein the hydrogen vent is further adapted to maintain the hydrogen concentration within the enclosure below about 4 percent without reliance upon any electrical device.

7. (original) A fuel cell according to Claim 6, wherein the hydrogen vent is adapted to maintain a hydrogen concentration within the enclosure below about 1 percent without reliance upon any electrical device.

8. (original) A fuel cell according to Claim 1, further comprising:
a second enclosure encompassing at least a part of the hydrogen flow path, the coolant flow path, or both; and
a hydrogen vent adapted to vent hydrogen from the second enclosure.

9. (original) A fuel cell according to Claim 8, wherein one of the enclosure or the second enclosure encompasses the other of the enclosure or the second enclosure.

10. (original) A fuel cell according to Claim 1, wherein the hydrogen vent is further adapted to prevent a flame front from passing through the vent.

11. (original) A method of manufacturing a fuel cell, comprising:
creating a hydrogen fuel flow path to conduct hydrogen through the fuel cell;
creating an enclosure which captures hydrogen that leaks, directly or indirectly, from the hydrogen fuel flow path; and
passively maintaining the level of hydrogen which leaks into the enclosure below a concentration level of about 4 percent.

12. (currently amended) A method of manufacturing a fuel cell according to Claim 11; wherein the enclosure is a coolant flow path adapted to conduct a liquid coolant through the fuel cell.

13. (currently amended) A method of manufacturing a fuel cell according to Claim 12, wherein passively maintaining the level of hydrogen further comprises selecting a porous material capable of passing hydrogen therethrough and capable of substantially preventing the liquid coolant from passing therethrough.

14. (original) A method of manufacturing a fuel cell according to Claim 13, further comprising locating the porous material in a wall of a coolant reservoir of the coolant flow path.

15. (original) A method of manufacturing a fuel cell according to Claim 12, wherein passively maintaining the level of hydrogen further comprises passively maintaining the level of hydrogen which leaks into the enclosure below a concentration level of about 1 percent.

16. (currently amended) A method of manufacturing a fuel cell according to Claim 11, further comprising creating a coolant flow path to conduct coolant through the fuel cell, and wherein the enclosure surrounds a member selected from the group consisting of ~~one of~~ a fuel cell stack through which the hydrogen fuel flow path and the coolant flow path pass, a coolant reservoir of the coolant flow path, and a hydrogen supply reservoir of the hydrogen fuel flow path.

17. (original) A method of manufacturing a fuel cell according to Claim 16, wherein passively maintaining the level of hydrogen further comprises selecting a porous material capable of passing hydrogen therethrough and capable of substantially preventing a flame front from passing therethrough.

18. (original) A method of manufacturing a fuel cell according to Claim 17, wherein selecting a porous material further comprises selecting a porous material selected from the group consisting of cellulose, plastic and metal.

19. (original) A method of manufacturing a fuel cell according to Claim 11, further comprising:

creating a second enclosure which captures hydrogen that leaks, directly or indirectly, from the hydrogen fuel flow path; and

maintaining the level of hydrogen which leaks into the second enclosure below a concentration level of about 4 percent.

20. (original) A method of manufacturing a fuel cell according to Claim 19, wherein one of the enclosure or the second enclosure encompasses the other of the enclosure or the second enclosure.

AMENDMENTS TO THE DRAWINGS

The attached "Replacement Sheet" of drawings includes changes to Figure 2. The attached "Replacement Sheet," which includes Figure 2, replaces the original sheet including Figure 2.

Attachment: Replacement Sheet(s)